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09:859,718

05/17/2001

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10/29/2003

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EXAMINER

PATEL, DHIRUBHAI R

ART UNIT

PAPER NUMBER

2831

DATE MAILED: 10/29/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/859,718

Applicant(s)

GUST ET AL.

Examiner

DHIRU R PATEL

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-17 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). ____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) ____ 6) ☐ Other: ____

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Part III DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

1. Claims 1 and 14 are rejected under 35 U.S.C. § 102(b) as being anticipated by Fox (5,043,627).

Fox discloses:

Regarding claim 1, at least one electrical conductor 20 (a power input pin, see figs 1 and 4, column 5 lines 50-55), a flexible electrical tubing 12 having an end (see fig 1, column 5 lines 55-60), said tubing loosely carrying said at least one electrical conductor therein (see figs 1-2, 5); and an electrical component 14 (see figs 1 and 4) associated with said at least one electrical conductor (see fig 1), said electrical component solely hermetically sealing said tubing end (see column 5 lines 50-68).

Regarding claim 14, at least one electrical conductor 20 (a power input pin, see figs 1 and 4, column 5 lines 50-55), a flexible electrical tubing 12 having an end (see fig 1, column 5 lines 55-60), said tubing loosely carrying said at least one electrical conductor (see figs 1-2, 5); a plug 16 solely hermetically sealing said tubing end, and said at least one electrical conductor extending through and sealed with said plug (see fig 1, column 5 lines 50-68).

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Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. § 103 (a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(f) or (g) prior art under 35 U.S.C. 103(a).

2. Claims 1-4, 7-10, and 13 are rejected under 35 U.S.C. § 103 (a) as being unpatentable over Guginsky (5,283,393) in view of Fox (5,043,627).

Guginsky discloses : an electrical assembly 10, comprising;

Regarding claim 1, at least one electrical conductor 29 (see fig 1), a flexible electrical tubing 11 having an end (conduit, see fig 1, column 3 lines 25-27, and Webster's II New Riverside

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University Dictionary page 296 define "conduit" as a tube), said tubing loosely carrying said at least one electrical conductor 29(see fig 1); and an electrical component 12 (fitting, see fig 1, column 3 lines 35-40) associated with said at least one electrical conductor 29 (see fig 1), said electrical component hermetically sealing said tubing end (see fig 1, column 2 lines 10-20, lines 45-60, and column 3 lines 35-45), but fails to disclose said electrical component solely hermetically sealing said tubing end. Fox teaches the use of hermetically attached to each end of the tube 12 is the base assembly 14 (column 5 lines 65-68) in order to provide a solely hermetically sealing (see abstract lines 1-6, column 5 lines 65-68). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the tubing end of the flexible electrical tubing 11 of the assembly of Guginsky with a base assembly as taught by Fox in order to provide said tubing end a solely hermetically sealing as well as protect the flexible electrical tubing 11 from environmental contamination entering into the flexible electrical tubing 11.

Regarding claim 2 , the modified assembly of Guginsky disclose all the features of the claimed invention as shown above, including said tubing including an inner surface (see fig 1 of Guginsky), said electrical component hermetically sealing with said inner surface (see column 2 lines 45-60 of Guginsky, please note that the modified assembly of Guginsky meet the claimed limitation).

Regarding claim 3, the modified assembly of Guginsky disclose all the features of the claimed invention as shown above, including said electrical component comprising an electrical

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connector (see column 4 lines 33-36 of Guginsky) having at least one electrical terminal (inherent properties of a connector), and capable of functioning as claimed by inventor.

Regarding claim 4, the modified assembly of Guginsky disclose all the features of the claimed invention as shown above, including a plug 14 (see fig 1 of Fox. please note that the modified assembly of Guginsky meet the claimed limitation)

Regarding claims 7 and 13, the modified assembly of Guginsky disclose all the features of the claimed invention as shown above, including said tubing including a non- smooth inner surface (see fig 1 of Guginsky), said electrical component (for claim 7) and said electrical connector (for claim 13) having an outer periphery which is in continuous, intimate physical contact with said inner surface (see fig 2 of Guginsky).

Regarding claim 8, the modified assembly of Guginsky disclosed all the feature of the claimed invention. With respect to said electrical component formed by the process of insert molding with said tubing. The presence of process limitations in product claims, which product does not otherwise patentably distinguish over prior art, cannot impart patentability to the product. In re Stephens 145 USPQ 656 (CCPA 1965).

Regarding claim 9, the modified assembly of Guginsky disclose all the features of the claimed invention as shown above, including said tubing having a non- smooth outer surface with one of a convoluted and spiral shape (see fig 1 of Guginsky).

Regarding claim 10, Guginsky discloses : an electrical assembly 10, comprising;
at least one electrical conductor 29 (see fig 1), a flexible electrical tubing 11 having an end (conduit, see fig 1, column 3 lines 25-27 and Webster's II New Riverside University Dictionary

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page 296 define "conduit" as a tube), said tubing loosely carrying said at least one electrical conductor 29 (see fig 1); and an electrical connector 12 (see column 4 lines 33-36) having at least one electrical terminal (inherent properties of a connector), said electrical component hermetically sealing said tubing end (see fig 1, see fig 1, column 2 lines 10-20, lines 45-60, and column 3 lines 35-45, and capable of functioning as claimed by inventor), but fails to disclose said electrical connector solely hermetically sealing said tubing end. Fox teaches the use of hermetically attached to each end of the tube 12 is the base assembly 14 (see column 5 lines 65-68) in order to provide a solely hermetically sealing (see abstract lines 1-6, column 5 lines 65-68) . Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the tubing end of the flexible electrical tubing 11 of the assembly of Guginsky with a base assembly as taught by Fox in order to provide in order to provide said tubing end a solely hermetically sealing as well as protect the flexible electrical tubing 11 from environmental contamination entering into the flexible electrical tubing 11.

3. Claims 5- 6 are rejected under 35 U.S.C. § 103 (a) as being unpatentable over Guginsky (5,283,393) in view of Fox (5,043,627) as applied to claims 1 above, and further in view of Shimirak et al (4,701,574).

Regarding claims 5- 6, the modified assembly of Guginsky disclose all the features of the claimed invention as shown above, but fails to disclose at least one annular projection

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engaged with said inner surface for claim 5, and a plurality of annular projections for claim 6. Shimirak et al teach the use of a plurality of annular projections 88 (see fig 3) in order to prevent positively water or moisture from propagating axially down the end seal along an outer surface 88 of the end seals (see column 4 lines 52-62). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the said electrical component of the modified assembly of Guginsky with at least one annular projection (for claim 5) and a plurality of annular projections (for claim 6) as taught by Shimirak et al in order to prevent positively water or moisture from propagating axially down the end seal along an outer surface of the end seals.

4. Claims 11-12 are rejected under 35 U.S.C. § 103 (a) as being unpatentable over Guginsky (5,283,393) in view of Fox (5,043,627) as applied to claims 10 above, and further in view of Shimirak et al (4,701,574).

Regarding claims 11-12, the modified assembly of Guginsky disclose all the features of the claimed invention as shown above, but fails to disclose at least one annular projection engaged with said inner surface for claim 11 and a plurality of annular projections for claim 12.

Shimirak et al teach the use of a plurality of annular projections 88 (see fig 3) in order to prevent positively water or moisture from propagating axially down the end seal along an outer surface 88 of the end seals (see column 4 lines 52-62). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide said electrical connector of the modified assembly of Guginsky with at least one annular projection (for claim 11) and a plurality of annular projections (for claim 12) as taught by

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Shimirak et al in order to prevent positively water or moisture from propagating axially down the end seal along an outer surface of the end seals.

5. Claims 14,17 are rejected under 35 U.S.C. § 103 (a) as being unpatentable over Guginsky (5,283,393) in view of Fox (5,043,627).

Regarding claim 14, Guginsky discloses at least one electrical conductor 29 (see fig 1), a flexible electrical tubing 11 having an end (conduit, see fig 1, column 3 lines 25-27), said tubing loosely carrying said at least one electrical conductor (see fig 1). Guginsky fail to disclose a plug solely hermetically sealing said tubing end , and said at least one electrical conductor extending through and sealed with said plug. Fox teaches the use of a flexible electrical tube 12 having at least one electrical conductor 20 extending through and sealed with a plug 14 in order to provide a solely hermetically sealing (see abstract lines 1-6, column 5 lines 65-68, column 6 lines 1-10). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the end of the flexible electrical tubing 11 of the assembly of Guginsky with a plug and said at least one electrical conductor extending through said plug as taught by Fox in order to provide said tubing end a solely hermetically sealing as well as protect the flexible electrical tubing 11 from environmental contamination entering into the flexible electrical tubing 11.

Regarding claims 17, the modified assembly of Guginsky disclose all the features of the claimed invention as shown above, including said tubing including a non- smooth inner

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surface (see fig 1 of Guginsky), said electrical component having an outer periphery which is in continuous, intimate physical contact with said inner surface (see fig 2 of Guginsky).

6. Claims 15-16 are rejected under 35 U.S.C. § 103 (a) as being unpatentable over Guginsky (5,283,393) in view of Fox (5,043,627) as applied to claims 1 above, and further in view of Shimirak et al (4,701,574).

Regarding claims 5- 6, the modified assembly of Guginsky disclose all the features of the claimed invention as shown above, but fails to disclose at least one annular projection engaged with said inner surface for claim 15, and a plurality of annular projections for claim 16. Shimirak et al teach the use of a plurality of annular projections 88 (see fig 3) in order to prevent positively water or moisture from propagating axially down the end seal along an outer surface 88 of the end seals (see column 4 lines 52-62). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the said electrical component of the modified assembly of Guginsky with at least one annular projection (for claim 5) and a plurality of annular projections (for claim 6) as taught by Shimirak et al in order to prevent positively water or moisture from propagating axially down the end seal along an outer surface of the end seals.

Response to Arguments

7. Applicant's arguments with respect to claims 1-17 have been considered but are moot in view of the new ground(s) of rejection.

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Contact information

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dhiru Patel whose telephone number is (703) 308 -3748. The examiner can normally be reached on Mondays- Thursdays from 6:30 am to 4:00 pm. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dean Reichard be reached at 703-308-3682. The fax number for this Group is 703-305-3431. Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 308-0956.

Dhiru Patel
Patent Examiner
Group Art Unit 2831
October 14, 2003

Dhiru R Patel
Primary Examiner
10/14/03.